

# Research at the AMT

**Welcome to the AMT – your reliable partner in research, development, and innovation for the autonomous and green mine of the future!**

Our Institute is dedicated to the research, development and innovation of novel technologies along the entire data-information-value chain. In an industry characterized by harsh and challenging conditions, we focus on developing ruggedized sensor technologies that enable high-quality data acquisition and data communication. Additionally, we employ advanced data analytics methods and algorithms to transform data into useful information for various mining applications.

Our research fields include

- Asset Monitoring and Diagnosis
- Mine Design and Energy Management
- Mine Communication
- Material Characterization
- Localization, Autonomous Navigation and Robotics
- Environmental Perception.

With a well-equipped and experienced mechanical and electrical workshop, modern IT infrastructure, state-of-the-art lab and sensor testing facilities, and a unique exploratory sandbox in a real mining environment, the AMT provides the ideal setting to develop and translate theoretical and small-scale developments into practical applications.

True to our motto, "AMT: Achieving More Together," the success of the AMT is built on our diverse and outstanding team. With great commitment, interdisciplinary skills, and a passion for our common goals, we are dedicated to shaping the future of mining in a sustainable and innovative way.

Join us in exploring the possibilities of autonomous and environmentally friendly mining technologies!

Details about our research areas you can find [here](#)!



